



The Commonwealth of Massachusetts

Department of Public Safety

Elevator Inspection Division

One Ashburton Place, Room 1301

Boston, MA 02108

Phone (617) 727-3200 Fax (617) 727-5732

Office Use Only

Permit No. _____

State ID No. _____

Date Rcvd: ____/____/____

Pre-Inspection Checklist for New Elevator Installations & Modernizations

This form is to be completed for each requested inspection for all installations of passenger, freight, LULA elevators, etc.

Notice: This checklist reflects the most common violations our field inspectors encounter when performing an inspection. Other violations may appear during inspections. It is suggested that elevator industry personnel have access to a current set of applicable codebooks. The three most common industry codebooks are: The ASME A17.1 Elevator Code 2004 edition; The Massachusetts State Building Code; NFPA 13 Sprinkler Code; NFPA #72 Fire Alarm Code; The NFPA #70 National Electric Code-2005 and the MA Elevator Regulation 524 CMR part 35.

Check each box when the item is completed and in compliance. Note any variances received from the Board of Elevator Regulations including the state ID number. Send this form to the above address to schedule a New Installation Permit Inspection.

In the Machine Room

- ☐ Access to and from the roof and machine room must be by the means of a stairway. When access is over a sloping roof or a roof with vertical obstructions, a walkway must be provided. Access must be safe and convenient. It is prohibited to allow access to a machine room to non-authorized personnel. See ASME A17.1 Rule 2.7.3.
- ☐ All non-elevator-related piping and equipment are prohibited from entering or passing through the machine room per ASME A17.1 Rule 2.8.1 and Rule 2.8.2.
- ☐ Electrical disconnects must be lockable in the open position and properly located within sight of the elevator devices as outlined in NFPA #70 Rule 620-51. All disconnects must be properly fused or utilize a non-self resetting circuit breaker. A lockable disconnect with overcurrent protection is required to be located in the machine room serving the car lighting per NFPA #70 620-22 and 620-53. Receptacles in the machine room and machinery spaces shall have GFCI protection either by a GFCI-type receptacle or a GFCI-type circuit breaker per NFPA #70 Rule 620-85. Warning signs shall be posted when there is power from more than one source per NFPA #70 Rule 620-52-see also 620-91 & 620-51.
- ☐ Electrical clearances are to be provided and maintained in front of the controller and disconnect at all times. It is interpreted that machine room doors that swing into the electrical clearance area endanger worker safety and are prohibited unless they meet the provisions of NFPA #70 Rule 620-5.
- ☐ Machine rooms are to be properly lighted so the electrical control devices and machinery are well illuminated. The light switch is to be located in the machine room and placed near the machine room doorjamb per ASME A17.1 Rule 2.7.5. The required lighting shall not be connected to the load side of a GFCI per NFPA #70 620-23.
- ☐ All electrical equipment, controllers, and machines are to be properly installed and grounded per NFPA #70 Rule 620-81 and ASME A17.1 Rule 2.8.1. All electrical conduits are to be properly secured and routed in a workman like manner. See NFPA #70 rule 620-21.
- ☐ An "ABC" type fire extinguisher is required to be located in the room per ASME A17.1 Rule 8.6.1.6.5. The fire extinguisher should be sized for the room dimensions.
- ☐ Holes around piping and structure penetrations in the machine room are to be properly filled to maintain a fire rated enclosure and firestopped per NFPA #70 Rule 300-21. All conductors used in raceways and for hoistway door interlock wiring shall be flame-retardant per NFPA #70 Rule 620-11/Table-13 & 18.
- ☐ The machine room door is to be self-closing and self-locking per ASME A17.1 Rule 2.7.3.4.
- ☐ The clear headroom in the machine room shall be not less than 7 feet. Machine rooms are to be vented and/or heated by mechanical or natural means to ensure proper-operating temperatures of the equipment at all times per ASME A17.1 rule 2.7.5.2.

In the Pit Area

- ☐ For pits greater than 36 inches in depth, a pit ladder is required with a handrail at least 42 inches above the landing. The ladder is to be non-combustible and located near the jamb side of the hoistway door, the rungs are to have a clearance of not less than 4 1/2 inches, spaced 12 inches apart and not less than 12 inches wide. See ASME A17.1 Rule 2.2.4. A pit refuge area of not less than 24 inches in height is also required when the car is on a fully compressed buffer per ASME A17.1 Rule 2.4.1 for traction/drum elevators and (24 inches x 47 inches horizontally x 24 inches high) or (18 inches x 35 inches horizontally x 41 inches high) depending on the pit design for hydraulic elevators per ASME A17.1 Rule 3.4.1.
- ☐ A pit stop switch is to be located adjacent to the pit ladder and about 18 inches above the landing in order to be accessible before stepping onto the pit ladder. A second pit stop switch is required when the pit exceeds 66" in depth. A light for the pit is to be located so as to provide adequate lighting for the area. The switch is to be near the stop switch. The light is to be guarded. See ASME A17.1 Section 2.2. The required lighting shall not be connected to the load side of the GFCI. Per NFPA #70 Rule 620-24.

A GFCI type receptacle is required in pits and on car tops per NFPA #70 Rule 620-85. When a sprinkler is present in pit area, all electrical conduits shall be enclosed in NEMA 4 conduit See ASME A17.1 Rule 2.8.2. A single receptacle supplying a permanently installed sump pump shall not require GFCI protection per NFPA #70-620-85.

In the Hoistway

- ☐ All offsets or ledges within the hoistway greater than two inches are to be tapered to not less than 75 degrees per ASME A17.1 Rule 2.1.6.
- ☐ Sprinklers provided in the Pit, (if required), are not to interfere the elevator car or the moving equipment within the hoistway. Only branch lines are permitted to serve the Pit. Heat detectors used to activate shunt trip devices shall be located within 2 feet of each sprinkler head. See ASME A17.1 Rule 2.8.2 and NFPA #72. Sprinkler heads located in the pit area shall not be located more than 2 feet above the pit floor per NFPA 13 Rule 4-13.5. Shunt trip devices are not allowed for pit sprinkler heads the sprinkler head is in conformance with the previous statement.
- ☐ Top and bottom car and counterweight runby and vertical clearances are required to meet the requirements of ASME A17.1 Section 2.4 for traction/drum elevators and ASME A17.1 Rule 3.4 for hydraulic elevators. Overhead working clearances must be provided in the upper end of the hoistway. When the elevator is at extreme travel, a minimum of 43 inch refuge area is required for traction/drum elevators when the counterweight is on a fully compressed buffer (plus inertia stopping distance calculation), and a 43-inch refuge area is to be provided for hydraulic elevators (when the stop ring is engaged). The horizontal area of the refuge space shall be outlined in a contrasting color. A minimum of 24 inches is required over the crosshead for traction elevators. Beams are not to interfere with these clearances. A minimum of 6 inches of clearance shall remain between the top of any auxiliary devices on the car-top and the overhead structure when the car is at extreme upward travel (strike point). Horizontal clearances shall meet ASME A17.1Section 2.5.

Operations and Miscellaneous Items

- ☐ Two-way 24-hour voice communication is to be provided from the elevator car to a location that can take action per ASME A17.1 Rule 2.27.1 and previous ASME interpretations.
- ☐ Fire-service initiating devices (smoke detectors) must be properly located in the enclosed elevator lobbies and machine rooms. Smoke detectors are required in the hoistway when a sprinkler head is located in the hoistway. See ASME A17.1 Section 2.27.3.2 & NFPA 72. Either the fire alarm initiating device in the machineroom or hoistway shall cause the visual signal in the car to illuminate intermittently per ASME A17.1 Rule 2.27.3.2. Firefighter’s service is not required for LULA elevators, but if provided, the installation must meet the full provisions of ASME A17.1 Rule 5.2.1.27.
- ☐ All glass used in construction of the hoistway enclosure must be laminated. The laminated glass must be marked with the proper ASME Z97.1 laminated glass etching on each and every panel per ASME A17.1 Rule 2.1.1.2.
- ☐ All hoistway/car door restricted opening devices shall be installed per ASME A17.1 Rule 2.12.5.
- ☐ Materials used on floor and walls of an elevator car enclosure must adhere to the flame spread and smoke density requirement of ASME A17.1 Rule 2.14.2. The materials must be certified and tested for their end use configuration including the type of adhesive used to secure the material. All glass used in the elevator cab must meet the marking requirements of ASME A17.1 Rule 2.14.1.8. Illumination at the landing sill shall be not less than 5 ftc per ASME A17.1 Rule 2.11.10.2. Hoistway door guides and safety retainers shall conform to ASME A17.1 Rule 2.11.11.
- ☐ All elevator controllers are required to be "UL" or "CSA" labeled as to conforming to the requirements of ASME A17.5. Hoistway door interlocks are to be certified. All signage required by NFPA #70 and ASME A17.1 must be properly installed including the following examples: code data plates, fire service instructions, emergency identification numbering, hoistway door floor numbers, rope data tags, in-car capacity tags, crosshead data tags, governor rope data tags, full-load working pressures, and governor tripping speeds.

A State inspector must inspect an elevator and a certificate of inspection issued before an elevator may be used for any purpose. No person or company including a contractor owner tenant or elevator company may use the elevator to haul construction materials furniture or personnel not directly related to the installation and construction of the elevator unless permitted by a certificate of inspection issued by the Department of Public Safety of the Commonwealth of Massachusetts

I certify that the following elevator State ID No: _____ Permit No: _____ is in compliance and ready for inspection.

Certified by: Print Name: _____ Signature: _____ Date: ____/____/____ Phone () _____

Location name		Address	City	Zip
Owner / Lessee		Address	City	Zip
Elevator Co.		Address	City	Zip

Remarks: _____